

REMARKS

Applicants' undersigned attorney thanks the Examiner for her comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-59 are pending, with Claims 22-49 withdrawn from consideration.

Amendments to the Claims

Claims 1-21 and 50-59 have been examined with no claims being allowed. Applicants have amended Claims 1 and 50. No new matter has been added by this Amendment.

Claims 1 and 50 have been amended to include the limitation that the first filaments and the second filaments do not overlap one another. Support for this amendment is provided in the figures and throughout the specification, such as on page 16, lines 7-15.

No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims remains unchanged.

Election/Restrictions

In response to the Examiner's restriction requirement, Applicants affirm election of Group I, which includes Claims 1-21 and 50-59.

Claim Rejections - 35 U.S.C. §103

A. Melbye et al. in view of Cederblad et al.

The rejection of Claims 1-7, 13-15, 18, 20-21, and 50-59 under 35 U.S.C. §103(a) as being unpatentable over Melbye et al. (PCT Publication No. WO 95/34264) in view of Cederblad et al. (U.S. Patent No. 5,885,686) is respectfully traversed, particularly in view of the above Amendment and the following remarks.

Melbye et al. disclose elastic sheet-like composites and disposable garments including such elastic sheet-like composites. The elastic sheet-like composites include one or two sheets thermally bonded directly to a multiplicity of

molten, extruded elastic strands. The elastic strands are formed by extruding an elastic thermoplastic material through a die. The die plate may have varied spacing and/or diameters to provide variable tension. However, Melbye et al. fail to disclose or suggest such sheet-like composites having at least two different types of strands made from at least two different types of materials. More particularly, since the elastic strands in Melbye et al. are extruded directly from a single extruder onto the facing material, Melbye et al. teach away from the inclusion of two or more types of strands made from different elastomeric polymers.

Cederblad et al. disclose an extruded bicomponent elastomeric netting having bi-directional elasticity. To form the netting, elastic strands necessarily overlap one another. The strands in the machine direction (MD) may have a different composition than the strands in the transverse direction (TD).

Neither Melbye et al. nor Cederblad et al., alone or in combination, disclose or suggest a targeted elastic laminate material having different zones of tension, with filaments in one zone having a different composition than filaments in a second zone. Furthermore, neither Melbye et al. nor Cederblad et al., alone or in combination, disclose or suggest a targeted elastic laminate material having filaments of different compositions bonded to a facing material, wherein the different types of filaments do not overlap one another.

The Examiner suggests that the use of different materials for the first and second strands in order to produce the different elastomeric properties, as Cederblad et al. suggest, is pertinent to the present invention. The Examiner further suggests that the teachings of Cederblad et al. will provide the Melbye et al. reference with an alternate embodiment that would provide the elastic material with different zones of elasticity by using two different elastomeric strands instead of producing these areas by increasing the quantity of strands in certain regions or using thicker and thinner strands.

A person skilled in the art would not be motivated to apply the concept of two different strand compositions from Cederblad et al. to the sheet-like composite of Melbye et al. because Cederblad et al. fail to disclose or suggest that varying the material among elastic strands produces the same effect as varying the quantity and/or

thickness of the strands. Furthermore, because of the vast differences between the structures, methods of making, and properties of the materials in Melbye et al. and Cederblad et al., is it unlikely that a person skilled in the art would be motivated to combine any aspect of these two inventions.

The sheet-like composite of Melbye et al. requires a facing material because the strands are parallel to one another. If no facing material were present in the sheet-like composite, there would be nothing to hold the strands together and all that would be left would be a pile of individual strands. In contrast, Cederblad et al. do not disclose or suggest a facing material bonded to the netting because the netting is solely made up of overlapping, mutually perpendicular, elastomeric strands that stretch in both the MD and the TD. If the netting were bonded to a facing sheet, the elasticity of at least some of the strands would be inhibited. Thus, Cederblad et al. teach away from the combination of elastic strands and a facing material. In fact, Cederblad et al. point out that even the bond points between the overlapping strands interfere with the elasticity of the strands (Col. 4, lines 6-18), and the invention attempts to minimize even this type of interference.

Additionally, the structure of Melbye et al. includes a facing material that is corrugated or compacted, or otherwise stretchable in one direction, such that the elastic strands stretch in the same direction as the facing material, thus resulting in a composite that is stretchable in just one direction. In contrast, the netting of Cederblad et al. is stretchable in two directions perpendicular to one another. Because Melbye et al. focus on stretchability in just one direction, and because the extrusion of elastic strands in two mutually perpendicular directions would not provide any benefits to the structure of Melbye et al., a person skilled in the art would not be motivated to combine the teachings of Cederblad et al. with the teachings of Melbye et al.

In terms of manufacturing processes, the sheet-like composite of Melbye et al. is obtained by extruding parallel elastic strands onto a substrate, resulting in a composite having uniaxial stretch. The composite has different tension in different zones, with these tension differences controlled through sizes and spacing of the strands, both of which can be controlled by the openings in a die plate. The

composition of a strand cannot be controlled by the openings in a die plate. In contrast, the netting of Cederblad et al. is obtained by extruding the strands in mutually perpendicular directions into the form of a cylinder or tube, which is then cut lengthwise and flattened. Even the processes of Melbye et al. and Cederblad et al. are completely incompatible with one another, such that neither of these processes can be slightly modified to achieve the structure of the other reference. Furthermore, because the strands in Melbye et al. are extruded from a single extruder, a completely different process would be needed to achieve the targeted elastic laminate of the present invention, and Cederblad et al. fail to provide any suggestion or motivation for modifying the process of Melbye et al., since Cederblad et al. fail to disclose or suggest that the use of two different elastomeric strands having different compositions can be used to achieve the same effect as two different elastomeric strands having different thicknesses or different spacing between strands.

The purpose of including two types of elastomeric strands, each having different compositions, in Cederblad et al. is for the strands in the MD to have different properties than the strands in the TD (Col. 3, line 66 – Col. 4, line 5). However, all of the strands in the MD have the same properties as one another, and all of the strands in the TD have the same properties as one another, such that all of the non-overlapping strands have the same properties as one another. Thus, the netting is not “targeted” in the sense that the “targeted” elastic materials of the present invention have different tension in different zones in the same longitudinal direction of the material. In contrast, the netting in Cederblad et al. may have different tension in the MD than in the TD, but all of the MD tension is uniform as is all of the tension in the TD. Therefore, a person skilled in the art would find no motivation to combine the teachings of Melbye et al. with the teachings of Cederblad et al. Even if Melbye et al. were combined with Cederblad et al., the combination would still fail to achieve the targeted elastic laminate material of the present invention because neither Melbye et al. nor Cederblad et al., nor the combination thereof, discloses or suggests the combination of strands of different elastic polymers applied in a non-overlapping pattern to a facing material to provide zones of varying tension in the same longitudinal direction.

For at least the reasons given above, Applicants respectfully submit that the teachings of Melbye et al. in view of Cederblad et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

B. Melbye et al. and Cederblad et al. further in view of Mleziva et al.

The rejection of Claims 8-12, 16-17, and 19 under 35 U.S.C. §103(a) as being unpatentable over Melbye et al. and Cederblad et al. as applied to Claims 1-7, 15, 18, 21, and 50-59 above, and further in view of Mleziva et al. (U.S. Patent No. 6,057,024) is respectfully traversed, particularly in view of the above Amendment and the following remarks.

As explained above, Melbye et al. and Cederblad et al., alone or in combination, fail to disclose or suggest the combination of strands of different elastic polymers applied in a non-overlapping pattern to a facing material to provide zones of varying tension. As pointed out by the Examiner, Melbye et al. and Cederblad et al. further fail to disclose any elastic tension relation between the low tension zone and the high tension zone, they do not disclose employing an elastomeric adhesive to bond the facing layer and the filaments, and they do not disclose using a spunbond material or a meltblown continuous filament composite web for the facing material.

Mleziva et al. disclose a composite elastic material including ribbon-shaped elastic elements joined to an extensible layer. Mleziva et al. fail to disclose or suggest high and low tension zones in the composite elastic material.

Neither Melbye et al., Cederblad et al., nor Mleziva et al., alone or in combination, disclose or suggest a laminate including at least one low tension zone including a plurality of elastomeric first filaments and at least one high tension zone including a plurality of elastomeric second filaments, wherein the first and second filaments do not overlap one another, and a facing material is bonded to the filaments.

The Examiner suggests that it would have been obvious to one of ordinary skill in the art to use the extrusion processes disclosed in Mleziva et al. to create the facing materials recited in Claims 16 and 17 of the present invention. The Examiner also suggests that it would have been obvious to one of ordinary skill in the art to use an elastomeric adhesive to bond the low and high tension zones to the facing

material based on the suggestion in Mleziva et al. that "various adhesive bonding techniques" can be used. However, as pointed out above, Cederblad et al. teach away from the concept of bonding a facing material to elastic strands. For this reason, and the other reasons presented above, the combined teachings of Melbye et al., Cederblad et al., and Mleziva et al. fail to disclose or suggest the targeted elastic laminate material of Claims 16, 17, and 19 of the present invention.

The Examiner also suggests that it would have been obvious to have optimized the elastomeric material of the present invention by providing the material with first and second strands of specific polymeric materials in order to form a fabric having the desired elastic tension through the process of routine experimentation, based on Cederblad et al.'s use of different elastomeric materials. However, as explained above, Cederblad et al. use all the same polymeric materials in the MD and all the same polymeric materials in the TD, resulting in a netting having uniform tension in the MD and in the TD. For this reason, and the other reasons presented above, the combined teachings of Melbye et al., Cederblad et al., and Mleziva et al. fail to disclose or suggest the targeted elastic laminate material of Claims 8-12 of the present invention.

For at least the reasons given above, Applicants respectfully submit that the teachings of Melbye et al. and Cederblad et al. as applied to Claims 1-7, 15, 18, 21, and 50-59 above, and further in view of Mleziva et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Double Patenting Rejections

A. U.S. Application No. 09/855,189

The provisional rejection of Claims 1-7, 13-21, and 50-59 under the judicially created doctrine of obviousness-type double patenting over claims 1, 15, 18, 19, 21, 22, and 49 of copending U.S. Application No. 09/855,189 in view of Cederblad et al. (U.S. Patent No. 5,885,686) is respectfully traversed.

The present application and U.S. Application No. 09/855,189 are pending. Allowable subject matter, notwithstanding the provisional obviousness-type

double patenting rejection, has not been indicated in either of these applications. Where a provisional rejection under the judicially created doctrine of obviousness-type double patenting is made between two or more applications, M.P.E.P. §804(I)(B) states that "[i]f the 'provisional' double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the 'provisional' double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent." It is not evident which of the pending applications will become allowable first. Therefore, any action by Applicants with regard to this provisional rejection is premature.

B. U.S. Application No. 09/855,195

The provisional rejection of Claims 1, 2, and 21 under the judicially created doctrine of obviousness-type double patenting over claims 9 and 10 of copending U.S. Application No. 09/855,195 is respectfully traversed.


The present application and U.S. Application No. 09/855,195 are pending. Allowable subject matter, notwithstanding the provisional obviousness-type double patenting rejection, has not been indicated in either of these applications. Where a provisional rejection under the judicially created doctrine of obviousness-type double patenting is made between two or more applications, M.P.E.P. §804(I)(B) states that "[i]f the 'provisional' double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the 'provisional' double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent." It is not evident which of the pending applications will become allowable first. Therefore, any action by Applicants with regard to this provisional rejection is premature.

Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,


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